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What is claimed is:

1. An optical amplifying and relaying system comprising an up and a down optical transmission line opposing each other, amplifiers each provided on each of the optical transmission lines, and monitoring light signal folding-back lines connected between the two optical transmission lines and each including an optical coupler for taking out a monitoring light signal led to the own optical transmission line and a wavelength selective reflecting means for transmitting the monitoring light signal received from the own optical transmission line by folding-back transmission to the opposite optical transmission line, wherein: the optical amplifying and relaying system further comprises variable optical attenuators each provided between each optical coupler and the associated wavelength selective reflecting means.

2. The optical amplifying and relaying system according to claim 1, wherein the optical couplers are each provided on the optical transmission line in the output side of each optical amplifier.

3. The optical amplifying and relaying system according to claim 1, wherein the optical couplers are each provided on the optical transmission line on the input side of each optical amplifier.

4. The optical amplifying and relaying system according to claim 1, wherein wavelength selective reflecting means are provided two on opposites of each of the variable optical attenuators, the two wavelength selective reflecting means being operative to reflect light signals of different wavelengths for transmission to the opposite optical transmission line.

5. The optical amplifying and relaying system according to claim 1, wherein the monitoring light signal folding-back lines each include a pair of lines for transmitting a light signal from the output side of the optical amplifier on the own optical transmission line to the input side of the optical amplifier on the opposite optical transmission line.

6. The optical amplifying and relaying system according to one of claims 1 to 5, wherein a light signal led to each monitoring light signal folding-back line is transmitted via a separate optical coupler and wavelength selective reflecting means of different wavelengths to the opposite optical transmission line.

7. An optical amplifying and relaying system comprising an up and a down optical transmission line opposing each other, amplifiers each provided on each of the optical transmission lines, and monitoring light signal folding-back lines connected between the two

optical transmission lines and each including an optical coupler for taking out a monitoring light signal led to the own optical transmission line and a wavelength selective reflecting means for transmitting the monitoring light signal received from the own optical transmission line by folding-back transmission to the opposite optical transmission line, wherein variable optical attenuators are each provided between each optical coupler and the associated wavelength selective reflecting means, the monitoring light signal branched and reflected by the optical coupler on each optical transmission line being transmitted via the optical coupler on the opposite optical transmission line to the optical amplifier output side thereof.

8. An optical amplifying and relaying system comprising an up and a down optical transmission line opposing each other, amplifiers each provided on each of the optical transmission lines, and monitoring light signal folding-back lines connected between the two optical transmission lines and each including an optical coupler for taking out a monitoring light signal led to the own optical transmission line and a wavelength selective reflecting means for transmitting the monitoring light signal received from the own optical transmission line by folding-back transmission to the opposite optical transmission line, wherein variable optical attenuators are each provided between each optical

coupler and the associated wavelength selective reflecting means, the monitoring light signal folding-back lines are each provided on the input side of the optical amplifier on the own optical transmission line.

9. An optical amplifying and relaying system comprising an up and a down optical transmission line opposing each other, amplifiers each provided on each of the optical transmission lines, and monitoring light signal folding-back lines connected between the two optical transmission lines and each including an optical coupler for taking out a monitoring light signal led to the own optical transmission line and a wavelength selective reflecting means for transmitting the monitoring light signal received from the own optical transmission line by folding-back transmission to the opposite optical transmission line, wherein variable optical attenuators are each provided between each optical coupler and the associated wavelength selective reflecting means, and the monitoring light signal branched and reflected by each coupler on optical amplifier output side of the own optical transmission line is transmitted via the optical coupler and optical amplifier input side on the opposite optical transmission line to the same opposite optical transmission line.

10. An optical amplifying and relaying system comprising an up and a down optical transmission line

opposing each other, amplifiers each provided on each of the optical transmission lines, and monitoring light signal folding-back lines connected between the two optical transmission lines and each including an optical coupler for taking out a monitoring light signal led to the own optical transmission line and a wavelength selective reflecting means for transmitting the monitoring light signal received from the own optical transmission line by folding-back transmission to the opposite optical transmission line, wherein variable optical attenuators are each provided between each optical coupler and the associated wavelength selective reflecting means, and optical couplers are provided on the output and input sides of each optical amplifier, and the branched and reflected monitoring light signals on each optical transmission line side are transmitted via the output and input sides, respectively, of the optical amplifier on the opposite optical transmission line to the same opposite optical transmission line.

11. An optical amplifying and relaying system comprising an up and a down optical transmission line opposing each other, amplifiers each provided on each of the optical transmission lines, and monitoring light signal folding-back lines connected between the two optical transmission lines and each including an optical coupler for taking out a monitoring light signal led to the own optical transmission line and a wavelength

selective reflecting means for transmitting the monitoring light signal received from the own optical transmission line by folding-back transmission to the opposite optical transmission line, wherein variable optical attenuators are each provided between each optical coupler and the associated wavelength selective reflecting means, and on each optical transmission line a monitoring light signal branched and reflected by an optical amplifier output side optical coupler via an optical coupler and the optical amplifier input side on the opposite transmission line to the same opposite optical transmission line, while a monitoring light signal branched and reflected by an optical amplifier output side on the opposite optical transmission line to the same opposite optical transmission line.

12. An optical amplifying and relaying system comprising an up and a down optical transmission line opposing each other, amplifiers each provided on each of the optical transmission lines, and monitoring light signal folding-back lines connected between the two optical transmission lines and each including an optical coupler for taking out a monitoring light signal led to the own optical transmission line and a wavelength selective reflecting means for transmitting the monitoring light signal received from the own optical transmission line by folding-back transmission to the opposite optical transmission line, wherein variable

optical attenuators are each provided between each optical coupler and the associated wavelength selective reflecting means, and on each optical transmission line the light signal led to the monitoring light signal folding-back line is branched by a separate optical coupler, then reflected by a plurality of wavelength selective reflecting means of different wavelengths and then transmitted to the opposite optical transmission line.

13. The optical amplifying and relaying system according to one of claims 7 to 12, wherein wavelength selective reflecting means is provided preceding to and subsequent to the variable optical attenuator.

14. The optical amplifying and relaying system according to one of claims 1 and 7 to 12, wherein an optical isolator is provided as an intermediate stage in each monitoring light signal folding-back line, and each wavelength selective reflecting means uses an optical fiber grating.